

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 21-129634 & 21-129635

Project Name/Address: Newport Sewer Basin Capacity Improvements

Planner: Leticia Wallgren (425)452-2044

lwallgren@bellevuewa.gov

Minimum Comment Period: February 14, 2022

Materials included in this Notice:

~	Blue Bulletir
V	Checklist
V	Vicinity Map
v	Plans
	Other:

OTHERS TO RECEIVE THIS DOCUMENT:

☑ State Department of Fish and Wildlife

☑ State Department of Ecology, Shoreline Planner N.W. Region

☑ Army Corps of Engineers

☑ Attorney General

☑ Muckleshoot Indian Tribe

NOTICE OF APPLICATION

Project Name: Newport Sewer Basin Capacity Improvements

Location: The project is located entirely within the right-of-way of Cascade Key between

62 Cascade Key and 2 Cascade Key. Vicinity Map available in project file.

Neighborhood Area: Newport

File Number: 21-129635-WG and 21-129634-LO

Description: Land Use review of a Shoreline Substantial Development Permit and Critical Area Land Use Permit for the City of Bellevue Utilities to construct an 8" diamter force main to improve capacity and realiability for the conveyance of excess wastewater within the vicinty of Cascade Key and the surrounding neighborhood. This work is within 200 feet of the Lake Washington shoreline jurisdiction. Additionally, the proposed main crosses Coal Creek.

Approvals Required: Shoreline Substantial Development Permit approval, Critical Areas Land Use Permit, and ancillary permits and approvals

SEPA: Determination of Non-Significance is expected. Refer to page one General Information Regarding Use of Optional DNS Process.

Minimum Comment Period Ends: February 14, 2022, 5 PM. Refer to page one for information on how to comment on a project.

Date of Application: November 1, 2021 **Completeness Date:** November 18, 2021

Applicant Contact: Birol Shaha, City of Bellevue Utilities, 425-452-4477,

bshaha@bellevuewa.gov

City Planner Contact: Leticia Wallgren, 425-452-2044, LWallgren@bellevuewa.gov

Newport Sewer Basin Capacity Improvements SEPA Checklist

November 2021

PREPARED FOR:

CITY OF BELLEVUE

PREPARED BY:

ESA 5309 SHILSHOLE AVENUE NW, STE. 200 SEATTLE, WA 98107

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Figure 1: Project Vicinity

Figure 2: Project Area and Existing Facilities

APPENDIX A: PROJECT PLANS

ENVIRONMENTAL CHECKLIST

BACKGROUND

1. Name of the proposed project, if applicable:

Newport Sewer Basin Capacity Improvements

2. Name of Applicant:

City of Bellevue

3. Contact Person and Phone

Birol Shaha, P.E.

Phone: (425)452-5286

Email: BShaha@bellevuewa.gov

4. Contact Person Address

City of Bellevue Utilities Department 450 110th Ave NE Bellevue, WA 98004

5. Date checklist prepared:

November 2021

6. Agency requesting checklist:

City of Bellevue Utilities Department 450 110th Ave NE Bellevue, WA 98009

7. Proposed timing or schedule (including phasing, if applicable):

Construction of the force main is proposed to begin in mid-2022 and will last approximately 6 months. A Right-of-Way use permit requirement is a one-half street overlay following construction of the force main. It is anticipated that this work will be performed under a separate City-wide street overlay project in the summer of 2023, and will last approximately one-to-two weeks.

8. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

There are no plans for future additions or expansions of the force main at this time.

9. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Documents that have been prepared that are related to the project include:

- Cascade Key Force Main and Newport Lift Station Replacement Project Geotechnical Engineering Report (Aspect Consulting, LLC, 2021).
- Newport Sewer Capacity Improvements, Stream Code Analysis (ESA, 2021).
- 10. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

There are no applications pending for government approvals or other proposals affecting the project area.

11. List any governmental approvals or permits that will be needed for your proposal, if known:

The following permits/approvals may be required for this project:

- Shoreline Substantial Development Permit (SSDP)(WG), City of Bellevue
- Critical Area Land Use Permit (CALUP) (LO), City of Bellevue
- Clear and Grade, City of Bellevue
- Right of Way Use for Government Project (TK), City of Bellevue
- 12. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

The Newport Sewer Basin, located in the City of Bellevue, has experienced significant sewer pipeline surcharging that results from stormwater infiltration and inflow to the sewer system during high intensity and high-volume storm events. During large rain events, excess storm water can seep into the aging sewer system through small cracks. This rain infiltration can overwhelm the capacity of the system and lead to the risk of wastewater backups in low-lying homes. Bellevue crews currently manage this problem by using vacuum trucks to transport excess wastewater to the Newport Pump Station. Relying on this manual operation is not ideal.

The proposed project would improve both capacity and reliability of the current sewer system by constructing a new sewer "force" main, designed to move wastewater flows away from under-capacity areas.

The project consists of construction of an 8-inch diameter normally dry shallow force main between the reflector manhole (MH 188127) and MH 188073. During high flow rain events, a City -owned portable pump will draw surcharging sewer flows from a suction port at the reflector manhole and pump them into an adjacent force main port. The force main will discharge into MH 188073 where the diverted flows will be conveyed to Newport Pump Station via an existing gravity main in Newport Key.

13. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a

street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project is located entirely within the right-of-way of Cascade Key between 62 Cascade Key (MH 188127) at the south end of the project and 2 Newport Key (MH 188073) at the north end of the project. This project is found with Sections 17 and 18 of Township 24 and Range 5.

Figure 1 shows the project vicinity and proposed force main alignment. Figure 2 shows the project area and existing City sewer facilities.

ENVIRONMENTAL ELEMENTS

Earth

A geotechnical investigation was performed at the project site by Aspect Consulting, LLC (2021). The work included a review of existing subsurface information for the project area, which included reviewing two historic soil borings, as well as performing three new Cone Penetration Tests (CPTs) within the right-of-way of Cascade Key. Information from this report is summarized in this section and incorporated throughout the SEPA Checklist as appropriate.

1.	General description of the site (underline):	
	Flat, rolling, hilly, steep slopes, mountainous, other	
_		

- 2. What is the steepest slope on the site (approximate percent slope)?
 - The City of Bellevue designates slopes greater than 40% with a rise of at least 10 feet and an area greater than 1,000 square feet as critical areas (Bellevue Land Use Code [LUC] 20.25H.120). The project area is predominantly flat. Steep slopes (slopes greater than 40%) are not present within the vicinity of the project (City of Bellevue, 2021a).
- 3. What general types of soils are found on the site (for example clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

According to the geotechnical report prepared by Aspect Consulting, soils found within the three CPTs included Fill, Alluvial Channel Deposits and Lacustrine and Overbank Deposits. Fill was comprised of a 4-inch layer of asphalt overlaying an 8-inch layer of base course, which overlays a layer of primarily loose, moist brown gravelly silty sand to a depth ranging between 2.5 to 5 feet. The Alluvial Channel Deposits were encountered in all CPTs and historic boring locations and consisted of sand with a

variable amount of silt and gravel content that often contained coal fragments and scattered organic matter. The Lacustrine and Overbank deposits unit generally includes soft/loose sediments deposited in slackwater lake or flooded delta or flooded delta environments and were observed below the fill and interbedded within the Channel Deposits.

Additionally, the Natural Resources Conservation Service (NRCS) (2021) indicates that the soil within the project area is Urban land and Briscot silt loam. There are no agricultural lands or soils located within the project.

4. Are there any surface indications or a history of unstable soils in the immediate vicinity? If so, describe.

The project area has a moderate to high risk of liquefaction (City of Bellevue, 2021a). Additionally, the area from 30 Cascade Key to the projects terminus at 2 New Key is mapped as an erosion hazard area.

5. Describe the purpose, type, total area, and approximate quantities of total affected area of any filling or grading proposed. Indicate source of fill.

Approximately 0.5 acre of the project area would be excavated and filled for the construction of the proposed sewer alignment and below grade structures involving approximately 5,600 cubic yards of material. The existing ground surface topography would remain essentially the same with only minor grading to shape the ground surface to facilitate surface drainage. Excavation quantities are estimated as follows:

- Cut = 2,800 cubic yards
- Fill = 2,800 cubic yards (imported crushed rock to replace excavated trench material, imported hot mix asphalt to replace removed asphalt)
- 6. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

As with any construction project, there is the potential for erosion to occur as a result of earthwork. Within this project area, erosion could occur from the construction of the sewer pipeline. The risk for erosion would be minimized with the adherence to best management practices (BPMs) (refer to question 8. below for further discussion).

7. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The project would not result in the construction of any new impervious surfaces.

8. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Best management practices (BMPs) are physical, structural, and/or managerial practices that can prevent or reduce the erosion and pollution of water caused by construction activities. The following mitigation measures and BMPs would be incorporated during construction to minimize the potential for erosion:

- Construction of the proposed project, including all staging areas, would be restricted to the project site.
- All debris and spoil material would be transported off-site to an appropriate disposal facility.
- A Construction Stormwater Pollution Prevention Plan (CSWPPP), which includes a Temporary Erosion and Sediment Control (TESC) Plan, would be required to prevent sediment transport from the project site.
- Other erosion control measures would be incorporated, as necessary, in accordance with City of Bellevue requirements.
- Erosion control measures could include use of silt fencing, catch basin inlet protection, and other measures as specified in the CSWPPP.
- Refueling would take place more than 100 feet from surface waters where practicable.

Air

1. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

While construction is underway, there may be a small increase of exhaust fumes from construction equipment and vehicles.

2. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of odors or emissions that would affect this proposal.

3. Proposed measures to reduce or control emissions or other impacts to air, if any.

Measures that could be incorporated during construction to minimize impacts to air quality include:

Spray exposed soil and storage areas with water during dry periods.

- Remove particulate matter deposited on paved, public roads and sidewalks to reduce mud and dust; sweep and wash streets frequently to reduce emissions.
- Equip construction equipment with appropriate emission controls.
- Comply with the Puget Sound Clean Air Agency (PSCAA) regulations to control odorous emissions so as to prevent undue interference with nearby uses.

Water

1. Surface Water:

a. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Lake Washington is located within the vicinity of the project site. Coal Creek crosses underneath the Cascade Key roadway bridge within the project area and flows from southeast to northwest to Lake Washington.

b. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Portions of the proposed sewer alignment are within 200-feet of Lake Washington. The alignment would also cross Coal Creek, via an existing bridge near 16 Cascade Key. Approximately 40 linear feet of the pipe will be attached to the bridge and will be above the ordinary high-water mark and the 100-year flood water surface elevation.

Project plans are available in Appendix A.

c. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No fill or dredge material would be placed in or removed from surface waters or wetlands

 Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities, if known.

The proposal would not require any surface water withdrawals or diversions.

Does the proposal lie within a 100-year floodplain? If so, note e. location on the site plan.

The area adjacent to Coal Creek is mapped by FEMA as a special flood hazard area (Zone AE), which is a 100-year floodplain. However, Coal Creek is located in a small portion of the project area. It is unlikely that the 100-year floodplain would have an impact on the proposed project because the pipeline will be almost entirely underground. The segment suspended from the existing bridge will be set higher than the underside of the bridge and approximately one foot above the 100-year flood water surface elevation of the creek. Since the pipe will be above the 100-year flood water surface elevation and since proposed grading is temporary and will not substantially alter the existing ground surface, the proposal will not result in increased flooding in the area.

Does the proposal involve any discharges of waste materials f. to surface waters? If so, describe the type of waste and anticipated volume of discharge.

> This project does not involve the discharge of waste material into surface waters. Work to install the force main will take place above the creek and a drop cloth will be used to prevent material from falling into the creek. Discharge associated with installing and removing BMPs during construction will be minimal.

2. **Ground Water:**

Will groundwater be withdrawn from a well for drinking water a. or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No water would be withdrawn for drinking and no water would be discharged into groundwater. Dewatering is not anticipated as a part of this project. However, if water is present within the trench during construction a trash pump would be used and the water would be sent to the existing sanitary sewer. If required, a King County Wastewater Discharge Permit would be obtained to allow for the water disposal.

b. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material would be discharged into the ground from septic tanks or other sources.

3. Water Runoff (including stormwater)

a. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater runoff on Cascade Key is collected and routed to the City of Bellevue's existing storm drainage system.

b. Could waste materials enter ground or surface waters? If so, generally describe.

There is the potential for runoff from construction, possibly containing equipment-related materials such as motor oil, diesel fuel and hydraulic fluid, as well as sediment. BMPs would be implemented and installed to reduce the potential for materials leaving the site and entering nearby surface waters (refer to question 3.d. below).

c. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe

Drainage patterns in the vicinity of the sites would not be affected by the proposed project.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

The project would be constructed in accordance with applicable City of Bellevue permits, which would specify a range of BMPs and temporary erosion and sedimentation control (TESC) measures designed to reduce or control potential surface, ground, or runoff water impacts. BMPs may include installation of catch basin filters and/or other appropriate cover measures. BMPs and TESC measures specific to the site and project would be specified by the City in the construction contract documents, and the construction contractor would be required to implement them.

Plants

1.

ensent and types of regional and entered
X deciduous tree: alder, maple, aspen, other
X evergreen tree: fir, cedar, pine, otherX shrubs
X grass
pasture
crop or grain
Orchards, vineyards or other permanent crops.
wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other water plants: water lilv, eelgrass, milfoil, other

Check the types of vegetation found on the site:

2. What kind and amount of vegetation will be removed or altered?

other types of vegetation

A minor amount of riparian vegetation would be removed immediately adjacent to the existing bridge crossing of Coal Creek to facilitate construction. No trees will be removed as part of this proposal.

3. List threatened or endangered species known to be on or near the site.

There are no threatened or endangered plant species located within the project area (WDFW, 2021a).

4. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Any vegetated areas disturbed by construction would be immediately restored following the completion of the project. Vegetation will be replaced in-kind.

5. List all noxious weeds and invasive species known to be on or near the site.

Eurasian watermilfoil has been found within Lake Washington near the site (King County, 2018). It is also likely that Himalayan blackberry is located on or near the site.

Animals

1. <u>List</u> any birds and <u>other</u> animals which have been observed on or near the site or are known to be on or near the site. Examples include:

Birds: songbirds, gulls, heron, eagle, hawks, ducks, crow,

woodpeckers, owls, grebes

Mammals: deer, rodents, raccoon

Fish: Bass, Black crappie, Brown bullhead, Cutthroat trout, Carp, Chinook salmon, Coho salmon, Crawfish, Green sunfish, Suckers, Northern pikeminnow, Peamouth, Perch, Pumpkinseed, Rainbow trout, Sculpin, Sockeye salmon, Tench, Three-spine stickleback,

Oriental weatherfish

Sources: eBird 2021, WDFW 2017

2. List any threatened or endangered species known to be on near the site.

WDFW priority habitat species maps Coal Creek, which is crossed by the proposed sewer alignment, as having a presence of *sockeye salmon* (*Oncorhynchus nerka*), coho calmon (*Oncorhynchus kisutch*), cteelhead trout (*Oncorhynchus mykiss*), cutthroat trout (*Oncorhynchus clarki*) and Chinook salmon (*Oncorhynchus tshawytscha*) (WDFW, 2021).

3. Is the site part of a migration route? If so, explain.

Puget Sound, including the project area is located within the Pacific Flyway, which acts as a flight corridor for migrating waterfowl and other birds. The Flyway extends from Alaska down to Mexico and South America. Coal Creek is also a fish migration route to the fish species mentioned in question 2. above.

4. Proposed measures to preserve or enhance wildlife, if any.

Impacts to wildlife are not anticipated as a result of the project; therefore, mitigation measures have not been proposed.

5. List any invasive animal species known to be on or near the site.

The New Zealand mud snail is found in Lake Washington and in adjacent Kelsey Creek and May Creek subbasins (King County, 2019). Invasive animal species likely to be in the area include rats and opossums, typical of an urban area.

Energy and Natural Resources

What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs?
 Describe whether it will be used for heating, manufacturing, etc.

The project would require the use of fossil fuels during construction to power equipment.

2. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

This project would not affect the potential use of solar energy by adjacent property owners.

3. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

The project would be in compliance with the Washington State Energy Code.

Environmental Health

1. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

As with any construction project, associated risks are leaks and spills from equipment. The risks of this project are within the range of typical construction projects. There would be no toxic or hazardous chemicals stored on site besides the fuels and oils needed to power equipment.

a. Describe any known or possible contamination at the site from present or past uses.

The Washington State Department of Ecology Facility/Site Database and What's In My Neighborhood Tool did not identify any sites contaminated sites in the direct vicinity of the project. However, both databases map numerous sites within 1-mile of the project site (Ecology 2021a and 2021b).

b. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

The project consists of constructing a new sewer force main. As a result, there is a chance that during construction activities, workers may come into contact with untreated wastewater. There are no known underground hazardous liquid or gas pipelines located within the project vicinity (National Pipeline Mapping System, 2020).

c. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Fuels and oil would be stored on site during construction to power equipment. Following construction, a portable pump will be

needed infrequently during emergency management of sewer surcharging only.

d. Describe special emergency services that might be required.

Emergency services are not anticipated to be required during project construction. However, since this project is located in a residential area, emergency services would be notified about the project prior to its construction. In addition, construction vehicles would not block any driveways or roads in the event that emergency services are required in the project vicinity.

e. Proposed measures to reduce or control environmental health hazards, if any:

Measures would be developed to reduce the potential for contact with untreated wastewater and ensure worker safety. These measures will be outlined in the contractor's Health and Safety Plan developed for the project.

2. Noise

a. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Vehicular traffic noise from roads in the vicinity is present, as well airplane traffic above the project area, boat noise from Lake Washington and other noise associated with single family residential neighborhoods.

b. What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

There would be a short-term increase of construction noise while the project is underway. Following construction, a portable pump will be needed infrequently during emergency management of sewer surcharging only. Noise generated by the pump will be lower than the noise levels currently generated by emergency management of sewer surcharging using vacuum trucks.

c. Proposed measures to reduce or control noise impacts, if any:

To mitigate the impacts from noise, construction would follow the Bellevue City Code, which states that construction is only allowed to take place during the hours of 7am to 6pm Monday through Friday and 9am to 6pm on Saturdays. Construction noise is not permitted on Sundays and legal holidays (BCC 9.18).

Land and Shoreline Use

 What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The project area consists single family residences; the new sewer pipeline will be located within the right-of-way of Cascade Key. The proposal is not anticipated to affect current land uses on nearby or adjacent properties.

2. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

The project area has never been used as working farmlands or forested lands. The project site has been a residential development since the 1960's.

a. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

The proposal would not have any effect on working farm or forest land.

3. Describe any structures on the site.

The proposed sewer alignment has single family homes located directly adjacent to both sides of Cascade Key.

4. Will any structures be demolished? If so, what?

No structures would be demolished as a result of the proposed project.

5. What is the current zoning classification of the site?

The project area is currently zoned as a single family residential area (R-2.5, City of Bellevue 2021).

6. What is the current comprehensive plan designation of the site?

The current comprehensive plan designation of the project site is single family medium density (SF-M, City of Bellevue 2019).

7. If applicable, what is the current shoreline master program designation of the site?

A portion of the proposed sewer alignment is located within 200 feet of the Lake Washington shoreline and is designated as Shoreline Residential Canal (City of Bellevue, 2015).

8. Has any part of the site been classified as a critical area by the city or county? If so, specify.

The proposed sewer alignment crosses over Coal Creek near 16 Cascade Key, Bellevue WA. A portion of the proposed sewer pipeline, beginning near 30 Cascade Key to the end of the alignment is also located within an erosion hazard area. Additionally, a landslide hazard area is mapped behind the homes located in the north eastern portion of the alignment (approximately 1 Cascade Key to 14 Cascade Key) (King County, 2021).

9. Approximately how many people would reside or work in the completed project?

No one would reside or work in the completed project. After construction, workers would only visit the site to deploy the portable pump during emergency operations and perform periodic regular maintenance for the sewer pipeline.

10. Approximately how many people would the completed project displace?

The completed project would not displace anyone.

11. Proposed measures to avoid or reduce displacement impacts, if any:

Displacement would not occur. Therefore, no mitigation measures are proposed.

12. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The new sewer pipeline would be located under the roadway of Cascade Key. Once completed, the project would not change the existing land use and would not have an impact on future land use.

13. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

There are no agricultural or forest lands in the vicinity of the project.

Housing

1. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

No new housing units would be provided as a result of this project.

2. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

No housing units would be eliminated by this project.

3. Describe proposed measures to reduce or control housing impacts, if any.

Since there would be no impact on housing, no mitigation measures are currently proposed.

Aesthetics

1. What is the tallest height of any of the proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

No new above-grade structures would be constructed, as the majority of the project would be constructed underground.

2. What views in the immediate vicinity would be altered or obstructed?

> Since the project would be located underground, no views in the immediate vicinity would be altered or obstructed.

3. Proposed measures to control or reduce aesthetic impacts, if any:

No impacts to aesthetics are anticipated from this project, therefore no measures have been proposed.

Light and Glare

1. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The project would not produce any additional light or glare.

2. Could light or glare from the finished project be a safety hazard or interfere with views?

No, the completed project would not create any light or glare.

3. What existing off-site sources of light or glare may affect your proposal?

There are no existing off-site sources of light and glare that may affect the proposal.

4. Proposed measures to reduce or control light and glare impacts, if any:

Impacts from light and glare are not anticipated, so no mitigation measures have been developed.

Recreation

1. What designated and informal recreational opportunities are in the immediate vicinity?

Recreation opportunities in the vicinity of the project include (City of Bellevue 2021c):

- Newcastle Beach Park is located directly south of the sewer alignment (approximately 165-feet from Cascade Key) and offers trails for hiking, a play structure, restrooms, and dock access to Lake Washington for swimming and boating.
- A portion of the 42-mile long East Trail is located approximately 220-feet to the east of the proposed sewer alignment. The trail connects the communities of Renton, Bellevue, Kirkland, Woodinville, Snohomish and Redmond.
- Coal Creek Natural Area is approximately 700-feet southeast of the sewer alignment and offers 4.5 miles of hiking trails.
- Mercer Slough Nature Park is approximately 0.25-mile north of the sewer alignment and has an environmental education center, with rentable rooms, a boat launch and hiking trails.

There are also additional recreational boating opportunities located throughout Lake Washington, as people launch from private property.

2. Would the proposed project displace any existing recreational uses? If so, describe.

The proposed project would not displace any existing recreational opportunities. The only impact to recreation would be a temporary increase of construction-related noise that may hinder the enjoyment of recreational opportunities at Newcastle Beach Park while construction is taking place.

3. Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant, if any:

Due to impacts being temporary and minor, no mitigation is currently proposed.

Historic and Cultural Preservation

1. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

There are no aboveground buildings, structures, or sites in or near the project site that are listed in or eligible for listing in a national, state, or local preservation register (Department of Archaeology and Historic

Preservation, 2019; King County Historic Preservation Program, 2018). Residences within the Newport Shores area developed in the early 1960s. The residence on the nearby parcel containing the Newport Lift Station was built in 1973. This residence meets the 40 years or older age threshold for historic resource in King County. No impacts to any area residences are anticipated.

2. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No archaeological sites, cemeteries, or traditional cultural places are recorded in project site (Department of Archaeology and Historic Preservation, 2019). Three prior cultural resources assessment have been conducted for projects adjacent to the project site near the Bagley Pump Station (Environmental Science Associates 2015; Ives et al. 2016; Juell 2001). These surveys were all conducted for transportation-related projects and identified historic aged resources near the project site including resources related to the Burlington Northern and Santa Fe (BNSF) Railway to the east of Newcastle Beach Park. The Statewide Predictive Model for encountering precontact-era sites classifies the project site as High Risk – Survey Highly Advised to Very High Risk – Survey Highly Advised (Department of Archaeology and Historic Preservation, 2010). This model does not take into account potential impacts from development or construction of prior lift and pump stations that would have likely disturbed any cultural resources, if present.

No recorded Native American placenames are associated with the project site specifically. However, Lake Washington and other waterways in the area were used for travel, resource gathering, and fishing. Coal Creek was known as SqE'bEqsid (Hilbert et al. 2001; Waterman 1922). A fishing village, Sa'cakat, associated with the Snoqualmie people was located along this stream near its mouth (Miller 2014: 228). A village site was located just north of Newport Shores at Mercer Slough, known as Sa'tsakaL (Water at the Head of the Bay). Its occupants were identified as Sa'tsakalEbc, and it was noted that "the place is important in mythology" (Hilbert et al. 2001:45). The myth associated with this location was not identified in available sources. This village was also noted to have been the staging location for the January 1856 attack on Seattle during the Treaty Wars. These indicate an established Native American presence in the general area.

Early survey records and map show a trail to the south of the project site leading from Lake Washington northeast as well as the homestead of Girard Kellogg (US Surveyor General 1865). A land patent including the project site was issued to Jeremiah Benson in May of 1869. By 1912 a wharf is shown to the north of the project site, much of the shoreline in the project vicinity was marshland until the lowering of Lake Washington in

1916 (Anderson Map Company 1907; Kroll Map Company 1912; USGS 1895, 1897). Early maps and aerial photography show the area of Newport as relatively undeveloped with few tracts of agricultural lands during the early 20th century (Kroll Map Company 1926; Metsker Map Company 1936; Pacific Aerial Survey 1937). An unpaved airfield, Lake Air or Lake Airpark, developed in the area that is now Newport Shores during the 1940s as well as increased commercial use along the Lake Washington shoreline in the 1950s (Banel 2018; King County Aerials 1954; USGS 1956). Little information could be found online for the airfield. The canals and residential development that make up the current Newport Shores appear on 1960s and 1970s topographic maps (USGS 1969; USGS 1976). Newcastle Beach Park development began in the 1980s. The project vicinity has continued to grow and develop throughout the late 20th and 21st centuries.

3. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

The following types of documents were reviewed in order to identify any potential cultural resources in the project vicinity: Department of Archaeology and Historic Preservation's Statewide Predictive Model and Washington Information System for Architectural and Archaeological Records Data (WISAARD), historical maps, aerial photographs, and published ethnographies and local histories. No consultation with tribes has been conducted to date.

4. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Due to the proximity to the shoreline and high to very high risk for precontact-era archaeological sites, a cultural resources survey is recommended prior to project work. Resources that meet the historic age threshold within or adjacent to the project site should be evaluated for local, state, and national eligibility. If cultural resources are identified during survey, additional archaeological work or construction site monitoring may need to be conducted under a DAHP Archaeological Site Alteration and Excavation. As a best management practice, project construction should, at a minimum, proceed under the terms of an Archaeological Resources Inadvertent Discovery Plan, and in accordance with all state laws related to the protection of archaeological resources and human remains (RCW 27.53, RCW 27.44, RCW 68.50, and RCW 68.60).

Transportation

1. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The proposed project is located within the right-of-way of Cascade Key.

2. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The sites are not currently served by transit. The nearest stop for bus routes 240 and 114 is approximately 1 mile away and at 119th Avenue SE and Coal Creek Parkway SE.

3. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

The completed project would not create or eliminate any parking spaces.

4. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

The proposal would not require any new or improvements to existing roads.

5. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The project would not use or occur in the immediate vicinity of water, rail or air transportation.

6. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The project would not generate any additional daily vehicle trips. The site would only be visited during high rain flow events to deploy the portable pump and to perform routine maintance.

7. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

The proposal would not interfere or effect the movement of agricultural and forest products.

8. Proposed measures to reduce or control transportation impacts, if any:

Impacts to traffic are not anticipated, therefore, no mitigation measures have been developed.

Public Services

1. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

The project would not result in the need for increased public services.

2. Proposed measures to reduce or control direct impacts on public services, if any.

Impacts to public services are not anticipated as a result of this project, so no mitigation is proposed.

Utilities

1. Underline utilities currently available at the site:

<u>electricity</u>, natural gas, <u>water</u>, refuse service, <u>telephone</u>, <u>sanitary sewer</u>, <u>septic system</u>, other

2. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

The project would construct a new underground sewer force main within the existing ROW of Newport Keys. The proposed project would improve both capacity and reliability of the current sewer system by constructing a new sewer main designed to move wastewater flows away from undercapacity areas.

SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:

Name of signee: Lisa Adolfson

Position and

Agency/Organization: Northwest Water Resources Group Director, ESA

Date Submitted: November 1, 2021





CITY OF BELLEVUE UTILITIES DEPARTMENT

CITY MANAGER
BRAD MIYAKE

MAYOR
LYNNE ROBINSON

DEPUTY MAYOR

JARED NIEUWENHUIS

DIRECTOR OF UTILITIES
NAV OTAL

CITY COUNCIL

JEREMY BARKSDALE

CONRAD LEE

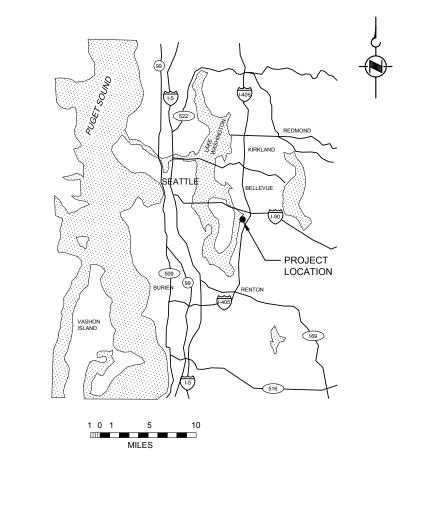
JENNIFER ROBERTSON

JOHN STOKES

JANICE ZAHN

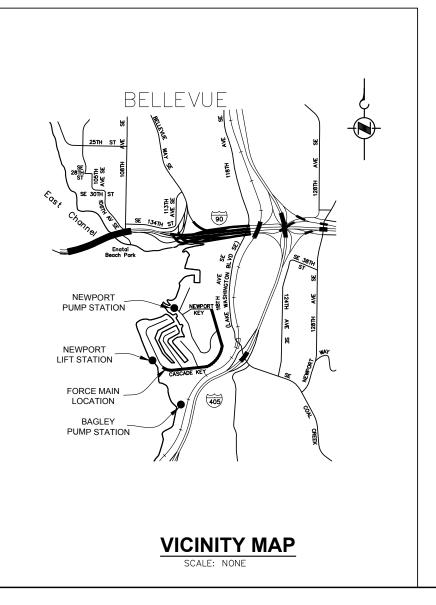
NEWPORT SEWER BASIN CAPACITY IMPROVEMENTS CASCADE KEY FORCE MAIN

30% REVIEW SUBMITTAL



LOCATION MAP

SCALE: AS SHOWN



	SHEET LIST TABLE				
SHEE T No	DWG NAME	SHEET TITLE			
1	G-1	COVER SHEET AND SHEET INDEX			
2	G-2	GENERAL NOTES, ABBREVIATIONS, AND LEGEND 1 OF 2			
3	G-3	GENERAL NOTES, ABBREVIATIONS, AND LEGEND 2 OF 2			
4	G-4	SITE PLAN, SURVEY CONTROL, DATUM			
5	T-1	TEMPORARY EROSION CONTROL AND SEDIMENTATION CONTROL (TESC) DETAILS NOT IN THIS REVIEW SET			
6	C-1	FORCE MAIN PLAN AND PROFILE			
7	C-2	FORCE MAIN PLAN AND PROFILE			
8	C-3	FORCE MAIN PLAN AND PROFILE			
9	C-4	FORCE MAIN PLAN AND PROFILE			
10	C-5	FORCE MAIN PLAN AND PROFILE			
11	C-6	FORCE MAIN PLAN AND PROFILE			
12	C-7	FORCE MAIN PLAN AND PROFILE			
13	C-8	FORCE MAIN PLAN AND PROFILE			
14	D-1	FORCE MAIN CONNECTION DETAILS			

PRELIMINARY NOT FOR CONSTRUCTION

BID NO. JOB NO.

	Approved By	
ANAGER		DATE
ROJECT MANAGER		DATE

SYMBOLS LEGEND

SURFACE FEATURES/LANDSCAPING

EXIST. PROP.

BUS \mathbf{II}

BUS STOP BUS

11 MAIL BOX

000

0

RIP RAP ROCKERY

EMBANKMENT

SHRUB \Box SIGN

TREE (Conifer) TREE (Deciduous) 0

YARD LIGHT

SANITARY/STORM SEWER SYMBOLS SAN. SEWER CLEAN OUT

STORM DRAIN CATCH BASIN

SAN. SEWER MANHOLE

STORM DRAIN CULVERT

STORM DRAIN MANHOLE

SURVEY SYMBOLS

ANGLE POINT

BENCH MARK BLOCK CORNER IRON PIPE MONUMENT (IN CASE) MONUMENT (SURFACE) OWNERSHIP TIE

SECTION DATA:

CAP/PLUG

SECTION CENTER



SECTION CORNER QUARTER CORNER SIXTEENTH CORNER CLOSING CORNER

∞ wc ⊕

MEANDER CORNER WITNESS CORNER SOIL BORING SPOT ELEVATION TAX LOT / PARCEL NUMBER

WATER SYMBOLS

COUPLING **GUARD POST** REDUCER THRUST BLOCK WATER METER FIRE HYDRANTS 2-NOZZLE 3-NOZZLE JOINTS: FLANGE/BLIND FL MECHANICAL PUSH-ON/HUB THREAD VALVES AIR RELIEF **BLOW-OFF** BUTTERFLY

GAS/POWER/TELEPHONE SYMBOLS

EXIST. PROP. GAS METER GAS VALVE PAD MOUNTED TRANSFORMER \triangle POWER VAULT P TRANSMISSION TOWER \boxtimes UTILITY POLE UTILITY POLE ANCHOR TELEPHONE RISER Т

TELEPHONE VAULT

■ ■ JUNCTION BOX (TYPE I, II, III)

GEOTECHNICAL SYMBOLS

- BORING LOCATION
- SURFACE SETTLEMENT POINT (SP)
- ▲ STRUCTURE MONITORING POINT (X, Y, Z)
- UTILITY SETTLEMENT POINT (USP)

SITE DEMOLITION LEGEND

AREA TO BE CLEARED AND GRUBBED

ධ ඩ ቸ የ 4 ቱ SE CHE

₹ 4

NO DATE BY APPR REVISIONS

Jacobs



NOT FOR CONSTRUCTION **PRELIMINARY**

30% REVIEW

Approved By

GATE/GENERAL PLUG VALVE

DEBBIE HARRIS BIROL SHAHA PROJECT MANAGER



City of Bellevue UTILITIES

NEWPORT SEWER BASIN CAPACITY IMPROVEMENTS CASCADE KEY FORCE MAIN LEGEND AND ABBREVIATIONS 1 OF 2

DRAWING G2 SHT 2 OF ASBESTOS CEMENT

ASPHALT TREATED BASE

ANGLE POINT

ASPHALT CONCRETE PAVEMENT

AMERICANS WITH DISABILITIES ACT

ACP

ADA

ATB

AP

SECTION NUMBER

SAME SHEET.

SECTION SCALE: 1 1/2" = 1'-0 M1Q2

DRAWING ON WHICH SECTION WAS TAKEN "-" INDICATES THE DRAWING IS TAKEN FROM THE

<u>ධ</u>-ඩ

ቸ <u>የ</u> 4

4

DETAILS ARE CROSS-REFERENCED IN A SIMILAR MANNER

IRON PIPE SIZE

KILOWATT HOUR

KING COUNTY

LENGTH

LINEAL FEET

KWH

MAN

ALL NEW MANHOLES SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48" AND SHALL CONFORM TO THE STANDARD DETAILS

SANITARY SEWER PIPE SHALL BE C900 PVC. BEDDING AND BACKFILL SHALL BE AS SHOWN IN THE STANDARD DETAILS.

1. ALL WORK SHALL CONFORM TO THE 2021 CITY OF BELLEVUE UTILITY ENGINEERING STANDARDS, UNLESS OTHERWISE SHWON.

WHERE SHOWN AS C900 PVC, THE SEWER PIPE SHALL HAVE DIMENSION RATIO (DR) AND CONFORM TO AWWA C900 OR AWWA C905.

NOT USED

NOT USED

7 NOT USED

NOT USED

THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN, AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREIN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN. IMMEDIATELY NOTIFY THE ENGINEER IF A CONFLICT EXISTS.

10. ALL TESTING AND CONNECTIONS TO EXISTING MAINS SHALL BE DONE IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF BELLEVUE UTILITIES DEPARTMENT

11. ALL TRENCHES SHALL BE COMPACTED, AND HMA IN PLACE IN PAVED AREAS, PRIOR TO TESTING SEWER LINES FOR ACCEPTANCE.

12. NOT USED

13. TOPS OF MANHOLES WITHIN PUBLIC RIGHTS-OF-WAY SHALL NOT BE ADJUSTED TO FINAL GRADE UNTIL JUST PRIOR TO PAVING.

ALL MANHOLES IN UNPAVED AREAS SHALL INCLUDE A CONCRETE SEAL AROUND ADJUSTING RINGS PER STANDARD DETAIL.

15. CONTRACTOR SHALL ADJUST ALL MANHOLE RIMS TO FLUSH WITH FINAL FINISHED GRADES, UNLESS OTHERWISE SHOWN.

ALL SEWER MAIN CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY OR IN EASEMENTS MUST BE "STAKED" BY A SURVEYOR LICENSED IN WASHINGTON STATE FOR "LINE AND GRADE" AND CUT SHEETS PROVIDED TO THE ENGINEER, PRIOR TO STARTING CONSTRUCTION.

CONTRACTOR SHALL INSTALL, AT ALL CONNECTIONS TO EXISTING DOWNSTREAM MANHOLES, SCREENS OR PLUGS TO PREVENT FOREIGN MATERIALS FROM ENTERING EXISTING SANITARY SEWER SYSTEM. SCREENS OR PLUGS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION AND SHALL BE REMOVED ALONG WITH COLLECTED DEBRIS AT THE TIME OF FINAL INSPECTION AND IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF BELLEVUE UTILITIES.

18. SURFACE RESTORATION OF EXISTING ASPHALT PAVEMENT SHALL BE AS REQUIRED BY THE RIGHT-OF-WAY USE PERMIT

19. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF TEN FEET (10') HORIZONTAL SEPARATION BETWEEN ALL WATER AND SEWER LINES. ANY CONFLICTS SHALL BE REPORTED TO THE UTILITY AND THE ENGINEER PRIOR TO CONSTRUCTION.

THE CONTRACTOR SHALL ENSURE AND VERIFY THAT NO CONFLICTS EXIST BETWEEN SANITARY SEWER LINES AND PROPOSED OR EXISTING UTILITIES PRIOR TO CONSTRUCTION.

MINIMUM COVER OVER SEWER PIPE SHALL BE 2.5 FEET, UNLESS OTHERWISE SHOWN.

22. THE CONTRACTOR SHALL USE A VACUUM STREET SWEEPER TO REMOVE DUST AND DEBRIS FROM PAVEMENT AREAS AS DIRECTED BY THE ENGINEER.

23 NOT USED

25. AVOID CROSSING WATER OR SEWER MAINS AT HIGHLY ACUTE ANGLES. THE SMALLEST ANGLE MEASURE BETWEEN UTILITIES SHOULD BE 45 TO 90 DEGREES.

AT POINTS WHERE EXISTING THRUST BLOCKING IS FOUND, MINIMUM CLEARANCE BETWEEN THE CONCRETE BLOCKING AND OTHER BURIED UTILITIES OR

WHERE NEW UTILITY LINE CROSSES BELOW AN EXISTING AC MAIN, THE AC PIPE SHALL BE REPLACED WITH DI PIPE TO 3 FEET PAST EACH SIDE OF THE TRENCH AS SHOWN ON STANDARD DETAIL W-8. ALTERNATIVELY, WHERE DIRECTED BY THE ENGINEER, THE TRENCH MAY BE BACKFILLED WITH CONTROLLED DENSITY FILL (C AKA FLOWARI F FILL) FROM BOTTOM OF TRENCH TO BOTTOM OF THE AC MAIN

28. CALL 1-800-424-5555, OR 811, 72 HOURS BEFORE CONSTRUCTION FOR UTILITY LOCATES.

29. MANHOLES, CATCH BASINS AND VAULTS ARE CONSIDERED TO BE PERMIT-REQUIRED CONFINED SPACES. ENTRY INTO THESE SPACES SHALL BE IN ACCORDANCE

THE CONTRACTOR SHALL PROVIDE COLOR CCTV FOLIPMENT, SHALL INCLUDE TELEVISION CAMERAS, A TELEVISION MONITOR, CARLES, POWER SOLIRCES. SIDE-LAUNCH CAPABLE IF NECESSARY, AND OTHER EQUIPMENT. FOCAL DISTANCE SHALL BE ADJUSTABLE THROUGH A RANGE FROM 6 INCHES TO INFINITY. THE CCTV EQUIPMENT SHALL INCLUDE A DISTANCE MEASURING INSTRUMENT (DMI) TO MEASURE THE HORIZONTAL DISTANCE TRAVELED BY THE CAMERA. THE DMI READOUT SHALL APPEAR CONTINUOUSLY ON THE VIDEO PRODUCED BY THE INSPECTION AND SHALL BE ACCURATE TO LESS THAN 1 PERCENT ERROR OVER THE LENGTH OF THE SECTION OF PIPELINE BEING INSPECTED. FOR STORM OR SANITARY SEWERS, THE LENGTH IS MEASURED FROM THE CENTERLINE OF THE MANHOL OR CATCH BASIN TO THE CENTERLINE OF THE NEXT MANHOLE OR CATCH BASIN.

SEE SECTION S5-13 CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION FOR VIDEO FORMATTING, NAMING, AND DELIVERY REQUIREMENTS.

THE CCTV INSPECTION SYSTEM SHALL BE PERFORMED UTILIZING ONE OF THE FOLLOWING VIDEO CAMERA SYSTEMS

REMOTE-FOCUS STATIONARY LENS CAMERAS

ROTATING LENS CAMERAS; OR PAN-AND-TILT CAMERAS.

THE CCTV CAMERA SHALL BE MOUNTED ON A SKID, FLOATABLE RAFT SYSTEM, OR TRANSPORTER BASED ON THE CONDITIONS OF THE PIPELINE TO BE TELEVISED TELEPHONES, RADIOS, OR OTHER SUITABLE MEANS OF COMMUNICATION SHALL BE UTILIZED TO ENSURE COMMUNICATION EXISTS BETWEEN MEMBERS OF THE CREW. THE CONTRACTOR SHALL INSPECT THE PIPELINE DURING OPTIMUM LOW-FLOW LEVEL CONDITIONS, AS PRE-APPROVED BY THE UTILITY INSPECTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY INSPECTOR PRIOR TO VIDEO INSPECTION. THE TELEVISION CAMERA UTILIZED SHALL BE SPECIFICALLY DESIGNED AND CONSTRUCTED FOR SEWER INSPECTION. THE CAMERA SHALL BE OPERATIVE IN 100 PERCENT HUMIDITY CONDITIONS. LIGHTING FOR THE CAMERA SHALL MINIMIZE REFLECTIVE GLARE. LIGHTING AND PICTURE QUALITY SHALL BE SUITABLE TO PROVIDE A CLEAR, IN-FOCUS PICTURE OF THE ENTIRE PERIPHERY OF THE PIPELINE FOR ALL CONDITIONS ENCOUNTERED DURING THE WORK. IF THE QUALITY OF THE VIDEO IS DEEMED TO BE UNACCEPTABLE BY THE UTILITY INSPECTOR, THE PIPELINE SHALL BE RE-TELEVISED AT NO COST TO THE CITY. THE CAMERA SHALL BE MOVED THROUGH THE PIPELINE AT A UNIFORM RATE, STOPPING WHEN NECESSARY TO ENSURE PROPER DOCUMENTATION OF THE PIPELINE CONDITION. BUT IN NO CASE SHALL THE TELEVISION CAMERA BE PULLED. A SPEED GREATER THAN 30 FEET PER MINUTE STOPPING WHEN NECESSARY TO ENSURE PROPER DOCUMENTATION OF THE PIPE CONDITION. THE VIDEO SHALL I TAKEN AFTER INSTALLATION, CLEANING, AND PRESSURE TEST TO INSURE THAT NO DEFECTS EXIST. THE PROJECT WILL NOT BE ACCEPTED UNTIL ALL DEFECTS HAVE BEEN REPAIRED.

WHEN WORK IS TO OCCUR IN EASEMENTS, THE CONTRACTOR SHALL NOTIFY THE EASEMENT GRANTOR AND BELLEVUE UTILITIES IN WRITING A MINIMUM OF 48 HOURS IN ADVANCE OF BEGINNING WORK (NOT INCLUDING WEEKENDS OR HOLIDAYS). FAILURE TO NOTIFY GRANTOR AND BELLEVUE UTILITIES WILL RESULT IN A STOP WORK ORDER BEING POSTED UNTIL THE MATTER IS RESOLVED TO THE SATISFACTION OF BELLEVUE UTILITIES. A WRITTEN RELEASE FROM THE EASEMENT GRANTOR SHALL BE FURNISHED TO THE UTILITY INSPECTOR PRIOR TO PERMIT SIGN-OFF

32. THE CONTRACTOR SHALL RESTORE THE RIGHT-OF-WAY AND EXISTING PUBLIC SEWER FASEMENT(S) AFTER CONSTRUCTION TO A CONDITION FOLIAL OR RETTER THAN CONDITION PRIOR TO ENTRY. THE CONTRACTOR SHALL FURNISH A SIGNED RELEASE FROM ALL AFFECTED PROPERTY OWNERS AFTER RESTORATION HAS BEEN COMPLETED.

	AVE	AVENUE	MAX	MAXIMUM
	AWG	AMERICAN WIRE GAGE	MFG	MANUFACTURER
	BEG	BEGIN	MH	MANHOLE
	BERG	BEARING	MIN	MINIMUM
	BNSF	BURLINGTON NORTHERN SANTA FE	MJ	MECHANICAL JOINT
	CB	CATCH BASIN	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEV
D	CCP	CYLINDER CONCRETE PIPE	N N	NORTH
LY				
	CDF	CONTROLLED DENSITY FILL	NO	NUMBER
	C&G	CURB AND GUTTER	NPT	NATIONAL PIPE THREAD
NT.	CL	CENTERLINE	NTS	NOT TO SCALE
	CMP	CORRUGATED METAL PIPE	OC	ON CENTER
	COB	CITY OF BELLEVUE	OD	OUTSIDE DIAMETER
	COMM	COMMUNICATION(S)	OHW	ORDINARY HIGH WATER
	CONC	CONCRETE	ОТ	OPEN TRENCH
	CONT	CONTINUOUS	P&R	PARK AND RIDE
	CP	CONTROL POINT	PC	POINT OF CURVATURE
	CSBC	CRUSHED SURFACING BASE COURSE	PCC	POINT OF COMPOUND CURVATURE
	CSTC	CRUSHED SURFACING TOP COURSE	PE	PLAIN END
	CU	COPPER	PERM	PERMANENT
	CY	CUBIC YARDS	PIV	POST INDICATOR VALVE
	DET	DETAIL	PL	PLATE
IES	DEMO	DEMOLISH	PLCS	PLACES
	DIP	DUCTILE IRON PIPE	PSE	PUGET SOUND ENERGY
	DIA	DIAMETER	PT	POINT OF TANGENCY
E	DIFF	DIFFERENTIAL	PVC	POLYVINYL CHLORIDE
_	DIPS	DUCTILE IRON PIPE SIZE	PVI	
				POINT OF VERTICAL INTERSECTION
	DIV	DIVISION	R	RADIUS
	DR	DIMENSION RATIO	RCP	REINFORCED CONCRETE PIPE
	DWG	DRAWING	REF	REFERENCE
	E	EAST	REQD	REQUIRED
	EB	EAST BOUND	RJ	RESTRAINED JOINT
	EL	ELEVATION	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
	ELEC	ELECTRICAL	RTU	REMOTE TELEMETRY UNIT
	EOP	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
	EXIST	EXISTING	S	SOUTH
	FE	FLANGE END	SD	STORM DRAIN
	FL	FLANGE	SE	SOUTHEAST
AS	FM	FORCE MAIN	SHT	SHEET
CDF,	FOC	FACE OF CURB	SIM	SIMILAR
	FRP	FIBERGLASS REINFORCED PLASTIC	SS	SANITARY SEWER, STAINLESS STEEL
	GALV	GALVANIZED	ST	STREET
E	GDR	GEOTECHNICAL DATA REPORT	STA	STATION
	GRAV	GRAVEL GRAVEL	STD	STANDARD
	HDPE	HIGH DENSITY POLYETHYLENE	S/W	SIDEWALK
		HORIZONTAL DIRECTIONAL DRILL		
_	HDD		TEMP	TEMPORARY
= OLE	HMA	HOT MIX ASPHALT	THD	THREADED
022	HORIZ	HORIZONTAL	TMA	TRUCK MOUNTED ATTENUATOR
	HR	HANDRAIL	TOC	TOP OF CONCRETE
	HSS	HALO STEEL SECTION	TRANS	TRANSITION
	l	INTERSTATE	TYP	TYPICAL
	ID	INSIDE DIAMETER	VCP	VITRIFIED CLAY PIPE
	ΙE	INVERT ELEVATION	VERT	VERTICAL
D.	INV	INVERT ELEVATION	W	WEST, WATER
U.	IN	INCH	W/	WITH
			WB	WEST BOUND
A			WM	WATER METER
OF			W/0	WITHOUT

AT				
RE				

NO DATE BY APPR REVISIONS



NOT FOR CONSTRUCTION **PRELIMINARY**

30% REVIEW

Approved By DEBBIE HARRIS

PROJECT MANAGER



ر دی	City	of
EJUE/10	Belle	

NEWPORT SEWER BASIN CAPACITY IMPROVEMENTS CASCADE KEY FORCE MAIN LEGEND AND ABBREVIATIONS 2 OF 2

SHT 3 **OF** 14 **DRAWING** G3

EQUIPMENT AND PROCEDURES:

1" (SECOND) TRIMBLE S-5(1) TOTAL STATION AND ELECTRONIC DISTANCE MEASURING UNIT CALIBRATED ON 07/24/2020 AND CONFORMS TO MANUFACTURE'S SPECIFICATIONS BY TRIMBLE REPRESENTATIVE FRONTIER PRECISION, INC.

1" (SECOND) TRIMBLE S-5(2) TOTAL STATION AND ELECTRONIC DISTANCE MEASURING UNIT CALIBRATED ON 12/20/2020 AND CONFORMS TO MANUFACTURE'S SPECIFICATIONS BY TRIMBLE REPRESENTATIVE FRONTIER PRECISION, INC.

1" (SECOND) TRIMBLE SX10-(2) TOTAL STATION AND ELECTRONIC DISTANCE MEASURING UNIT COMBINED WITH A TERRESTRIAL LASER SCANNER CALIBRATED ON 06/28/2020 AND CONFORMS TO MANUFACTURE'S SPECIFICATIONS BY TRIMBLE REPRESENTATIVE FRONTIER PRECISION, INC.

1" (SECOND) TRIMBLE SX10-(2) TOTAL STATION AND ELECTRONIC DISTANCE MEASURING UNIT COMBINED WITH A TERRESTRIAL LASER SCANNER CALIBRATED ON 06/28/2020 AND CONFORMS TO MANUFACTURE'S SPECIFICATIONS BY TRIMBLE REPRESENTATIVE FRONTIER PRECISION, INC.

PRIMARY CONTROL POINTS DERIVED BY CONVENTIONAL TOTAL STATION TRAVERSE AND ADJUSTED USING MICROSURVEY STAR*NET LEAST SQUARES ADJUSTMENT SOFTWARE, VERSION 9.2.

BASIS OF BEARING:

FOR MAIN SCOPE ALONG CASCADE KEY; INITIAL BASELINE DERIVED BETWEEN CITY OF BELLEVUE'S CONTROL POINT NO'S (COB 2626) AND (COB 2627) N 65' 26' 47" E, HD = 162.67' AND CLOSING TO CITY OF BELLEVUE'S CONTROL POINT NO'S (COB 402) AND (COB 400) N 87' 45' 28" W, HD = 824.44'

FOR ADDITIONAL CUL-D SAC SCOPE NW SKAGIT KEY; CITY OF BELLEVUE'S CONTROL POINT NO'S (COB 2633) AND (COB 3339) S 42' 12' 41" E, $\,$ HD = 417.63'

 α CITY OF BELLEVUE'S CONTROL POINT NO'S (COB 2633) AND (COB 2634) N 33' 39' 43" E, HD = 430.73'

WASHINGTON STATE PLANE COORDINATE SYSTEM NAD 83/2011 NORTH ZONE, US SURVEY FOOT.
PROJECT GRID COORDINATES BASED UPON THE CITY OF BELLEVUE'S SURVEY STATION DATA CARD'S OBSERVED BY CONVENTIONAL TOTAL STATION OBSERVATIONS, SCALE FACTOR = 1, WHERE GRID = GROUND MEASUREMENTS FOR PROJECT LIMITS.

THE VERTICAL DATUM IS NAVD88

ELEVATIONS DETERMINED BY DIFFERENTIAL LEVEL OBSERVATIONS FROM A TRIMBLE DINI DIGITAL LEVEL WITH A BARCODE FACE LEVEL ROD.

FOR MAIN SCOPE ALONG CASCADE KEY;
COMMENCING AT COB #622, PC/PT MIC ON CENTERLINE 118TH AVE SE, 35' FEET+/- SOUTH OF THE SOUTHERN ONE WAY EXIT @ INTERSECTION NEWPORT KEY & 118TH AVE SE.
BENCHMARK ELEVATION=46.045'

FOR ADDITIONAL CUL-D SAC SCOPE NW SKAGIT KEY;
COMMENCING AT COB # 621A, PC/PT MIC ON CENTERLINE @ NORTH END SKAGIT KEY WHERE SKAGIT KEY TURNS EAST AND BECOMES TULALIP KEY, OPPOSITE HOUSE #80 SKAGIT KEY. BENCHMARK ELEVATION=23.518

REFERENCE'S:

RIGHT OF WAY LINES AND CENTERLINES PORTRAYED HEREIN ARE BASED ON SURVEYED CENTERLINE MONUMENTATION. PARCEL LINES PORTRAYED HEREIN ARE BASED ON KING COUNTY GIS DATA.

INTENDED USE OF THE TOPOGRAPHIC ELEMENTS SHOWN HEREIN ARE FOR CIVIL ENGINEERING PURPOSES. CONTOURS PORTRATED HEREIN ARE DERIVED FROM DIRECT TOTAL STATION FIELD OBSERVATIONS. CONTOUR ACCURACY IS ONE-HALF THE CONTOUR INTERVAL FOR LAND BASED MEASUREMENTS ONLY.

401300000 ET

PROJECT LIMITS ARE ALONG CASCADE KEY FROM INTERSECTING ENTRANCE WITH LAKE WASHINGTON BLVD. TO APPROXIMATELY 750' WESTERLY OF CRESCENT KEY ALONG SAID CASCADE KEY IN BELLEVUE, WASHINGTON

LOCATED IN PORTIONS OF THE NORTHWEST QUARTER OF SECTION 16, & THE NORTHEAST & THE SOUTHEAST QUARTER'S OF SECTION 17 TOWNSHIP 24 NORTH, RANGE 5 EAST, WILLAMETTE MERIDIAN, KING COUNTY, WASHINGTON

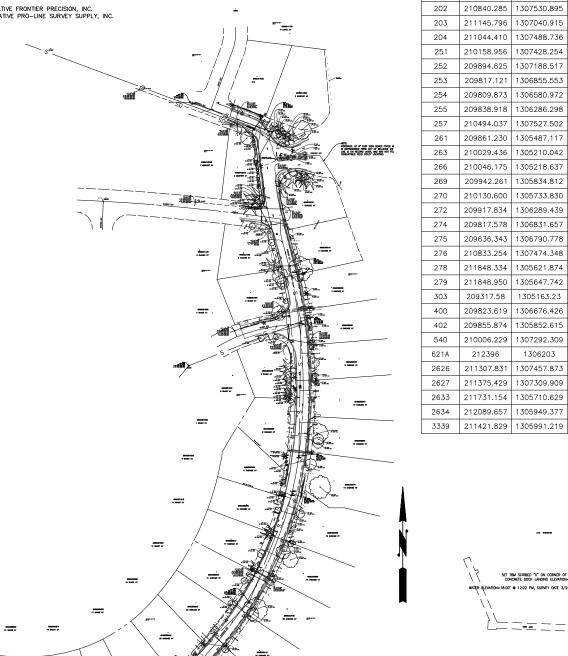
THIS IS NOT A BOUNDARY SURVEY.

DATES VISITED - MARCH 24, 25, 29 & APRIL 1, 7-9 & MAY 12 2021

40/1000223 73 CHAINGE HY

#700000 # 04000 #7

71 0#00E 0



60 SOUT IV SET THM SCRIBED X ON CORNER OF LOWER— CONCRETE DOCK LANDING ELEVATION=18.42 407300000 A 0000000 or 3.00° @ 12:22 PM. SURVEY DATE 3/24/2021 # 00000F #F * 00,000,00 40 0000 m and the same of 0000000 H dame. denom 44 0000E 07 000000 EF 2D LINE WORK REPRESENTED IN THIS AREA WAS TRACED FROM AERIAL ORTHO PHOTOGRAMMETRY TO SHOW THE LOCATION OF A TEMPORARY BENCHMARK AND THE LAKE WATER IF YANDON REL AITED TO SAID REPROHABIK egusore M order o #27000000 #4 CARREST TO 4012888844 68 GROOM IV # 1000E F 667366666 54 CHOOLE 67 milmon H coccc er 604130000 53 040000 4 00000 C adma 60 CHECKS 107 40 00000 N 4 0000E 17 4 04045 10

NO DATE BY APPR REVISIONS

61 04040 er

Jacobs



NOT FOR CONSTRUCTION **PRELIMINARY**

30% REVIEW	M
AUGUST 2021	B P

• • •	•
BBIE HARRIS	10/2018
NAGER	DATE
OL SHAHA	10/2018
DJECT MANAGER	DATE

Approved By

City	BEL	
	CO LINE	21 (TE 21
Rell	Skilling S	TE 21 TE
011	-171140	115

y of evue **TLITIES**

NEWPORT SEWER BASIN CAPACITY IMPROVEMENTS						
CASCADE KEY FORCE MAIN						
SITE PLAN, SURVEY CONTROL, DATUM						
DRAWING	G4	SHT	4	OF	14	

SCALE IN FEET

SURVEY CONTROL POINT TABLE

FI EVATION

38.830

43.817

41.658

37 750

34.549

30.911

43.736

26.615

27.185

26.400

30.110

37,691

38.946

39.374

24.268

42.089

23.518

38.104

33.947

23.030

22.552

DESCRIPTION

FND MON COB 4400 SITE BM

FND BRASS CAP COB 3335

MON IN CASE COB 2624

MON IN CASE COB 3333

MON IN CASE COB 2625

SET MAGNAII

SET MAGNAIL

MON IN CASE

SET MAGNAIL

MON IN CASE

MON IN CASE COB 2623

MON IN CASE

MON IN CASE

MON IN CASE

MON IN CASE

MON IN CASE COB 2619

MON IN CASE

MON IN CASE

MON IN CASE

SET MAGNAIL

MON IN CASE, HELD COB 2D

MON IN CASE, HELD COB 3D

MON IN CASE COB 2621

MON IN CASE, HELD COB 3D

PK & WASHER, HELD COB 2D

MON IN CASE, HELD COB 3D

MON IN CASE, HELD COB 2D

MON IN CASE, HELD COB 3D

23.299 MON IN CASE, HELD COB 2D

18.42 SET SCRIBED X IN CONC PIER

FASTING

1307634.594

1307492.180

POINT #

NORTHING

211193.852

211100.809

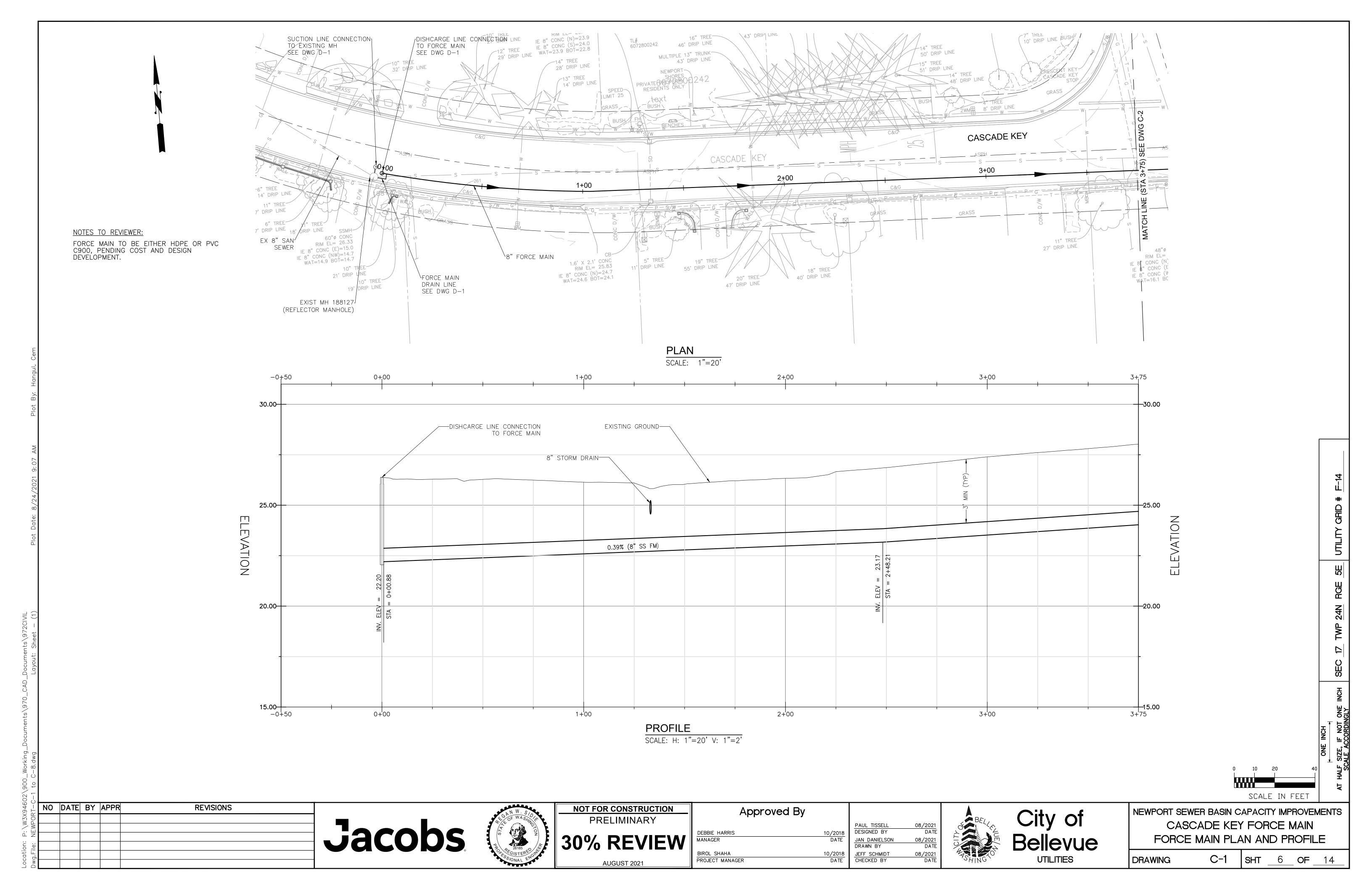
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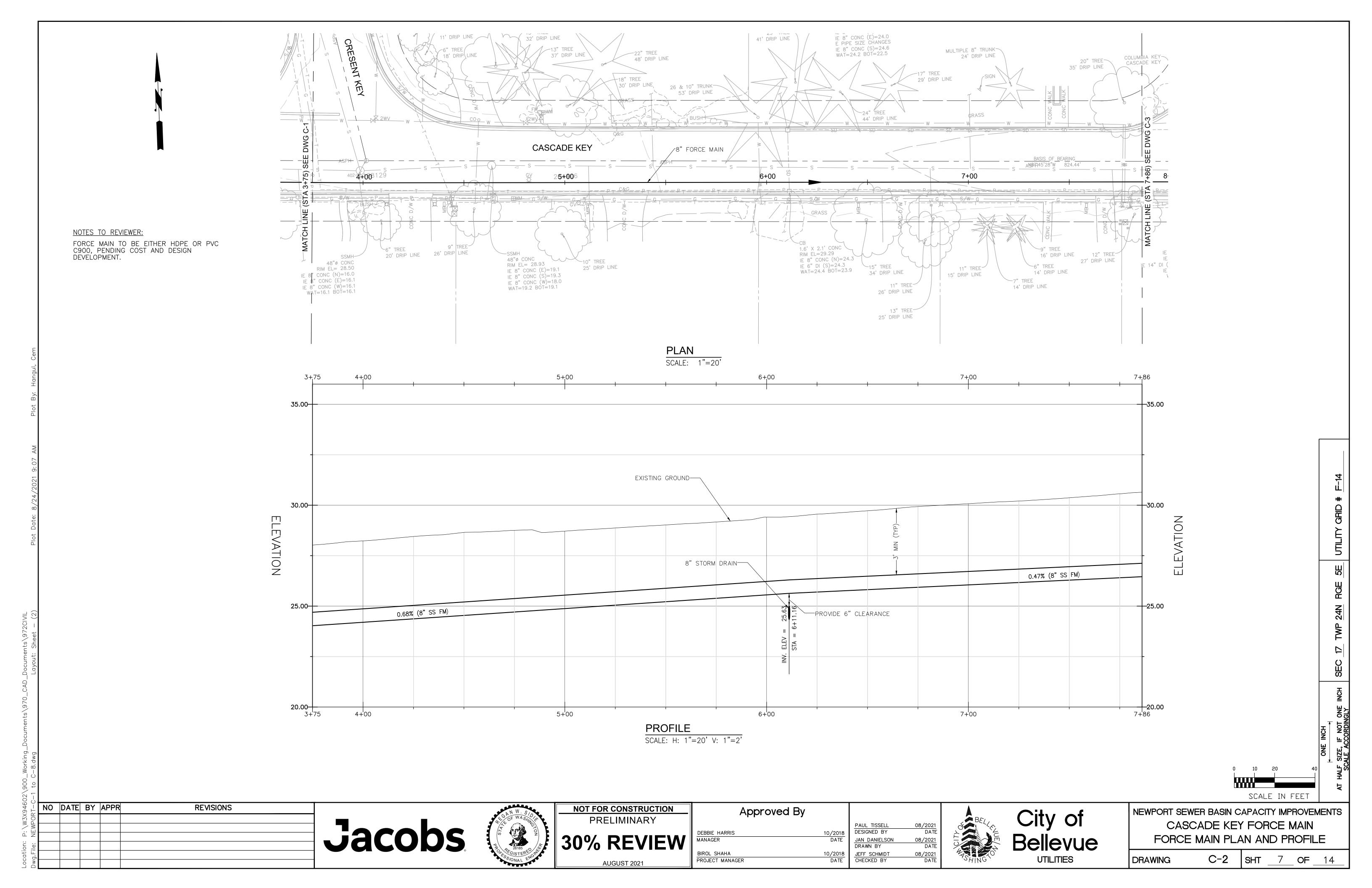
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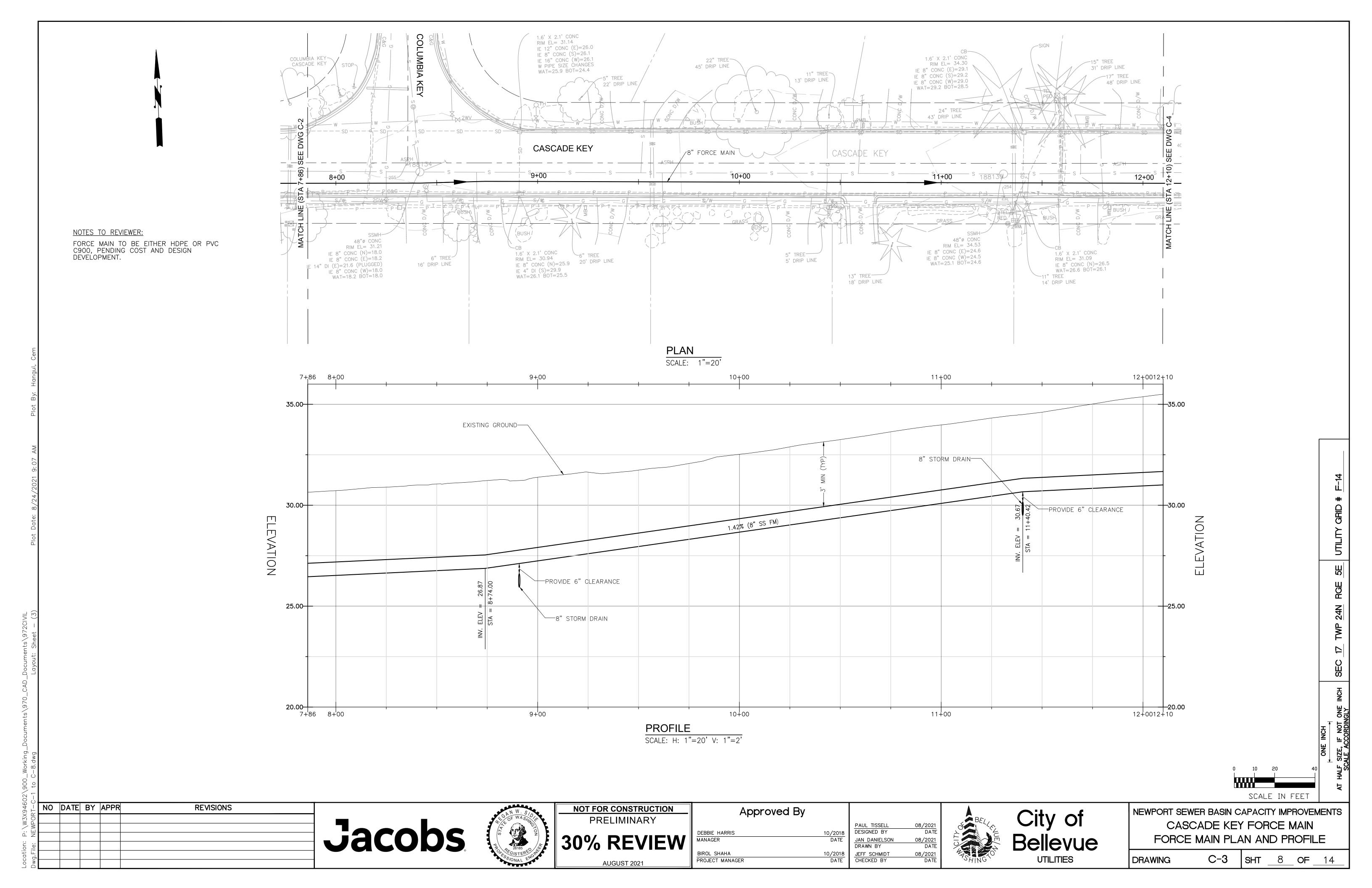
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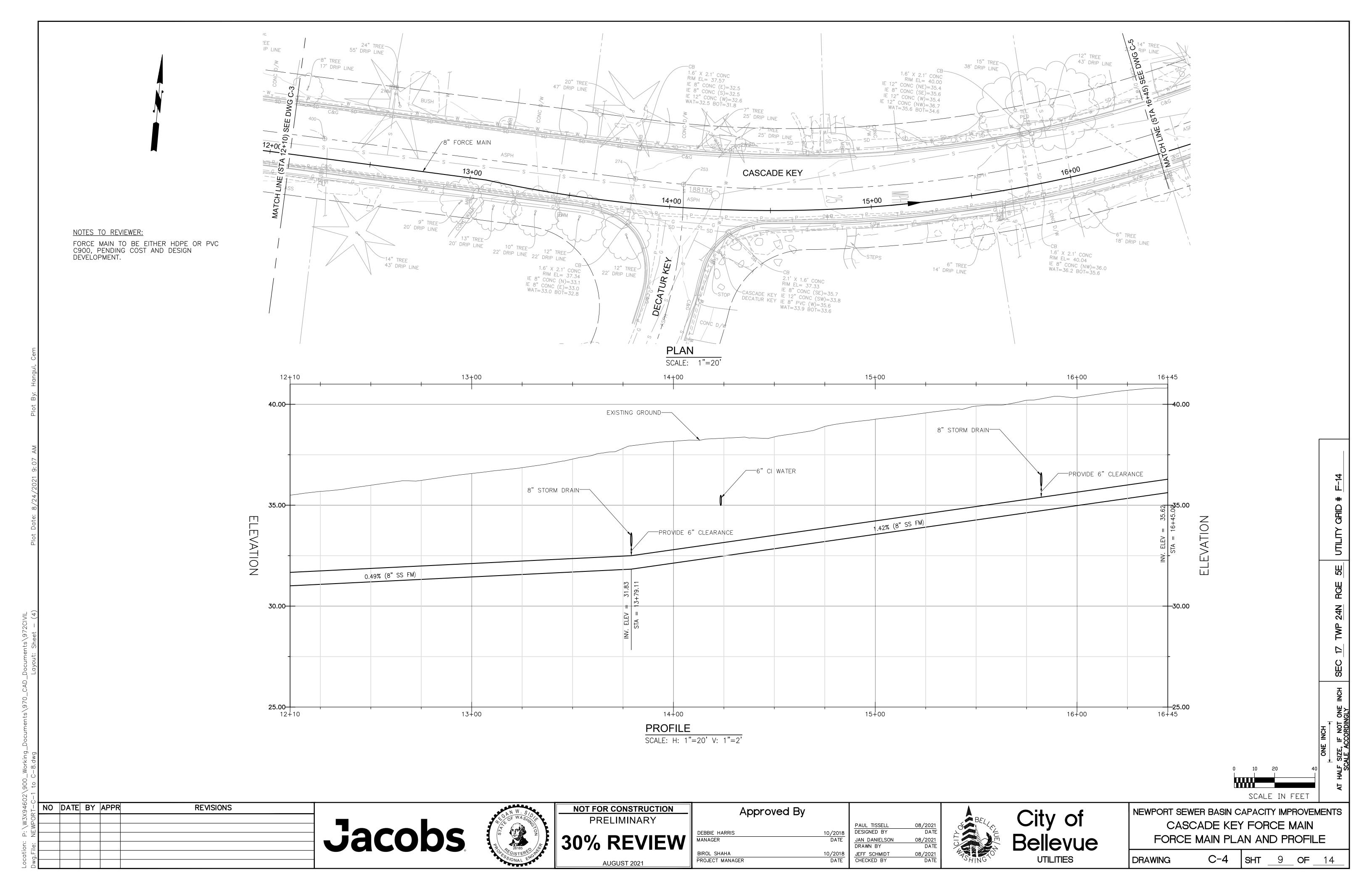
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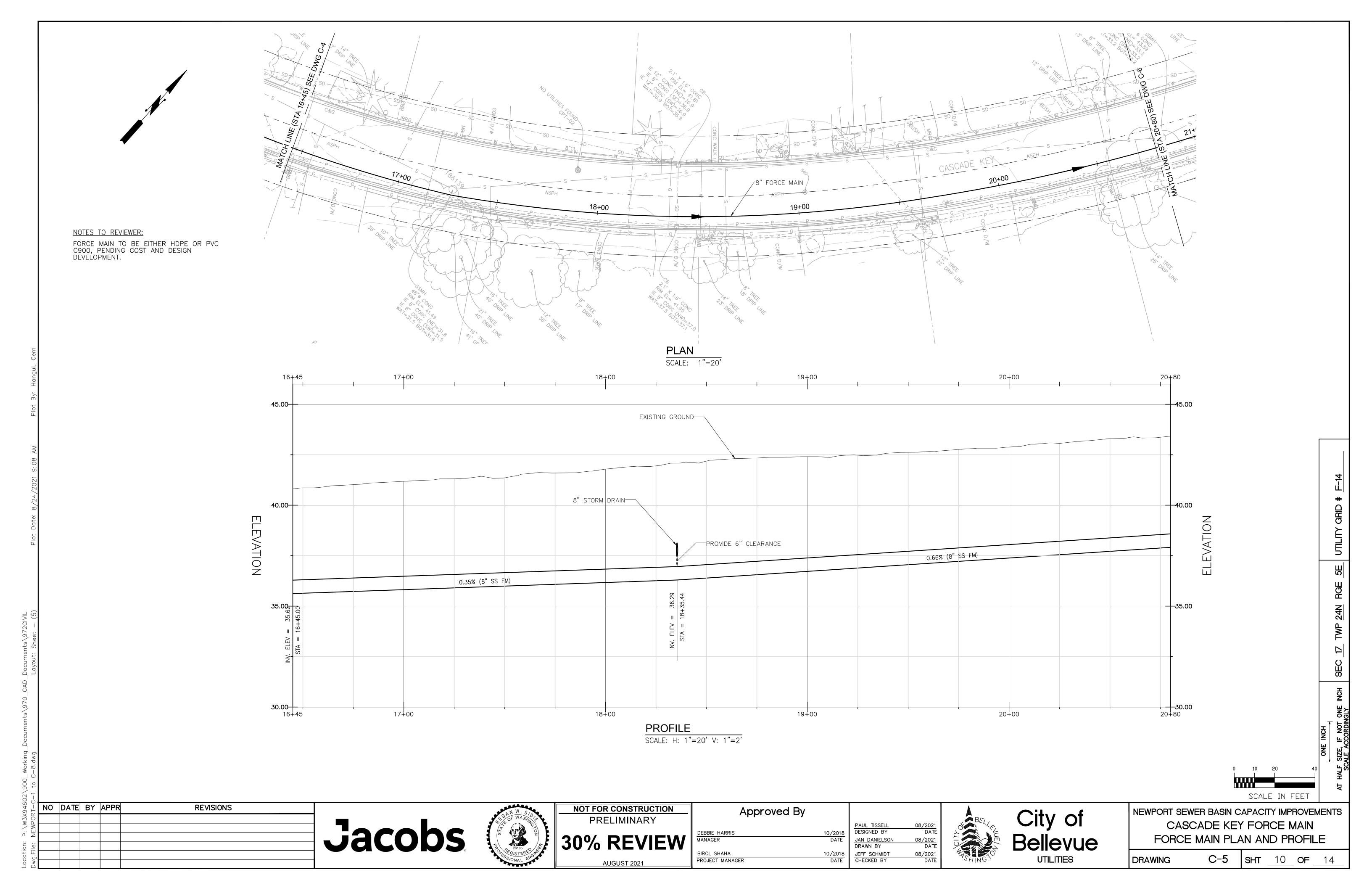
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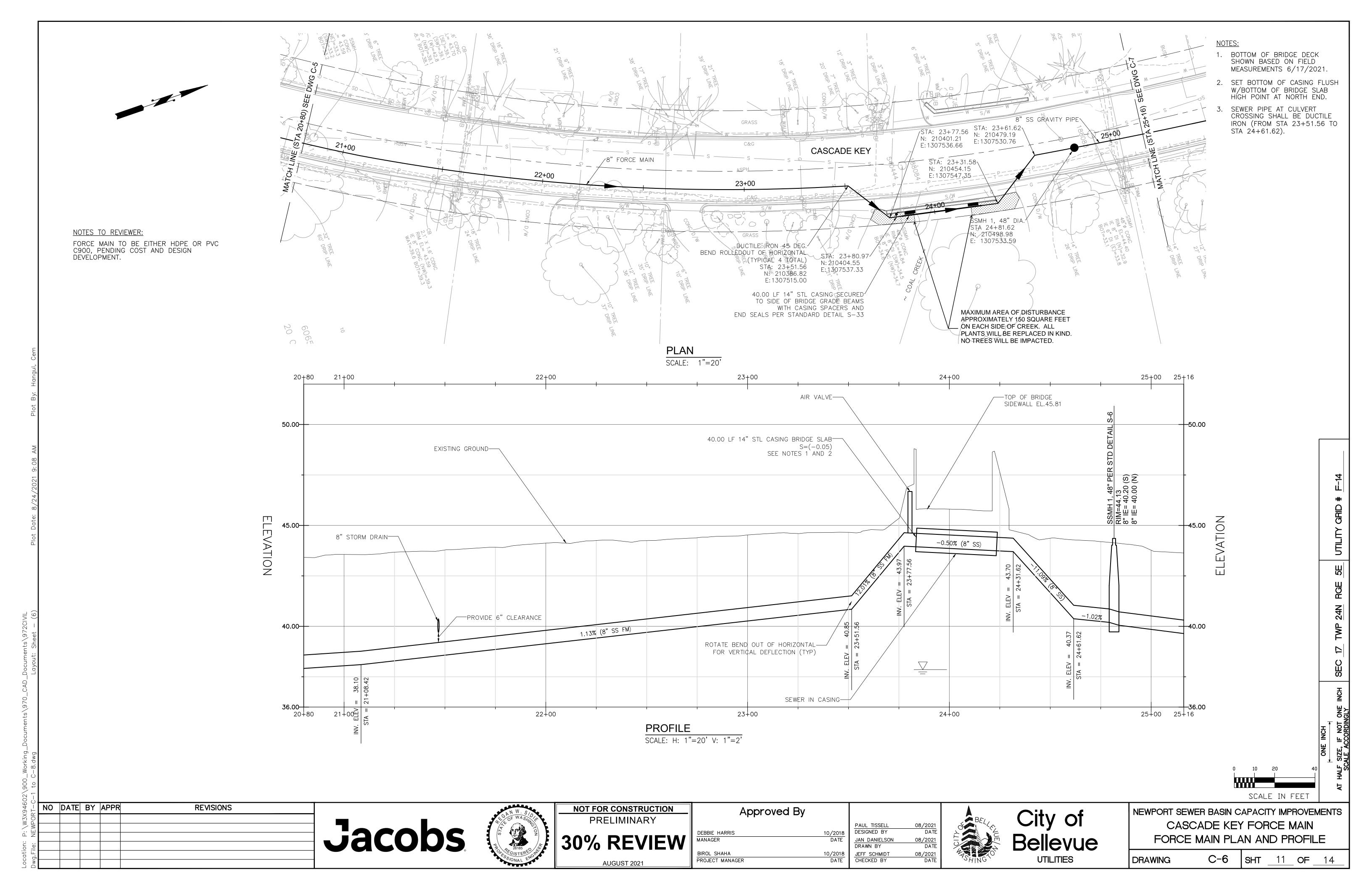


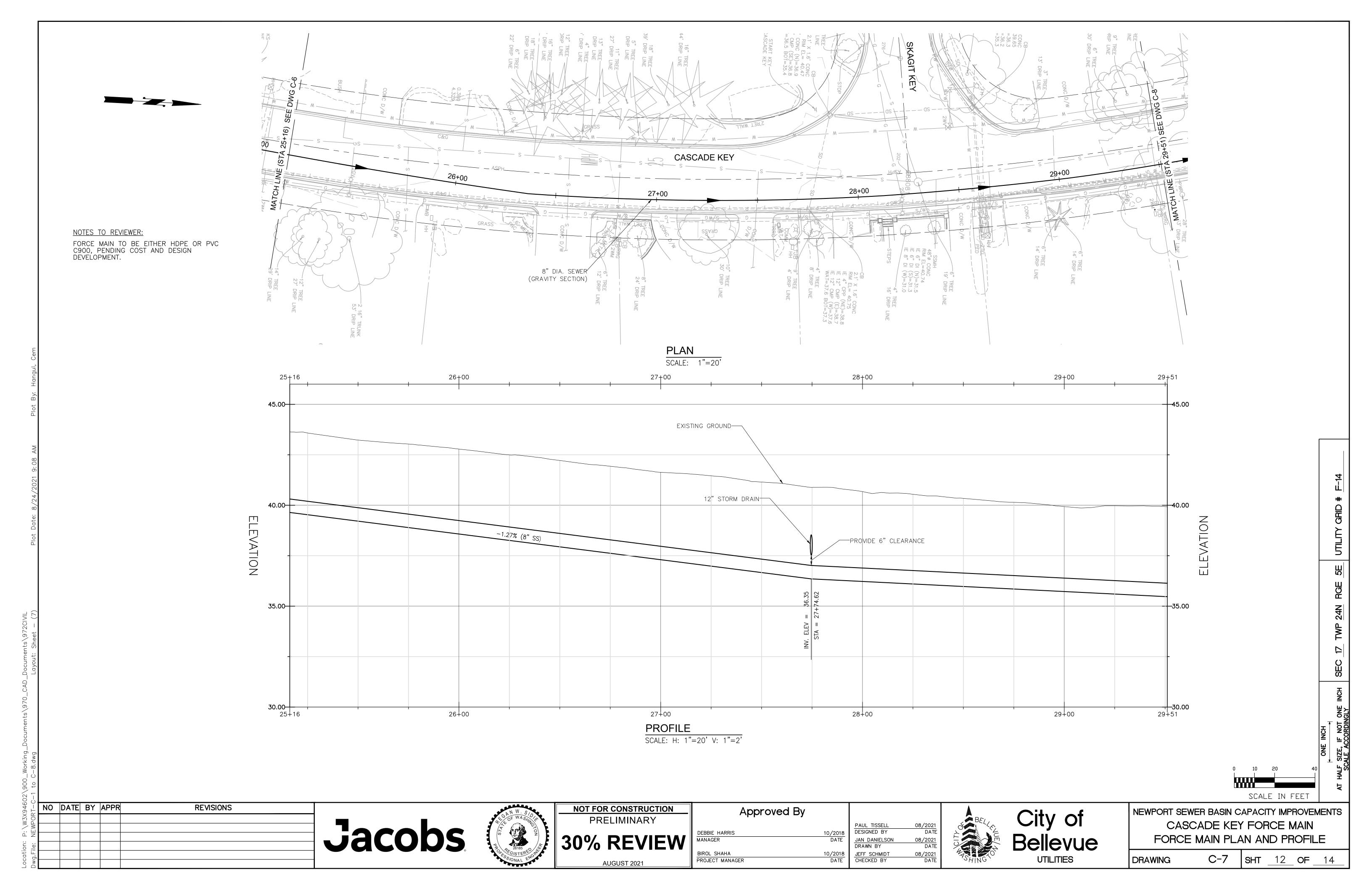


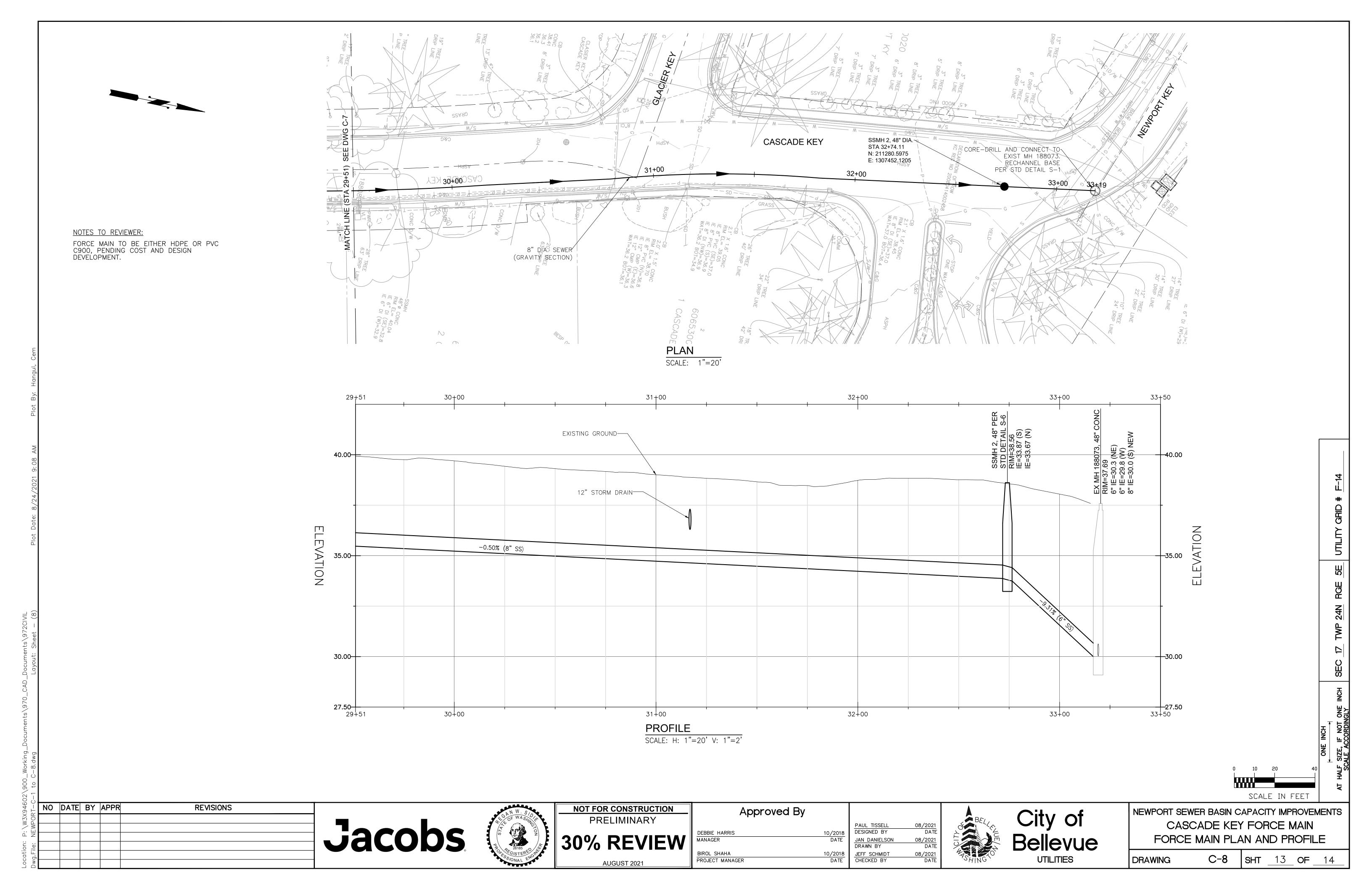


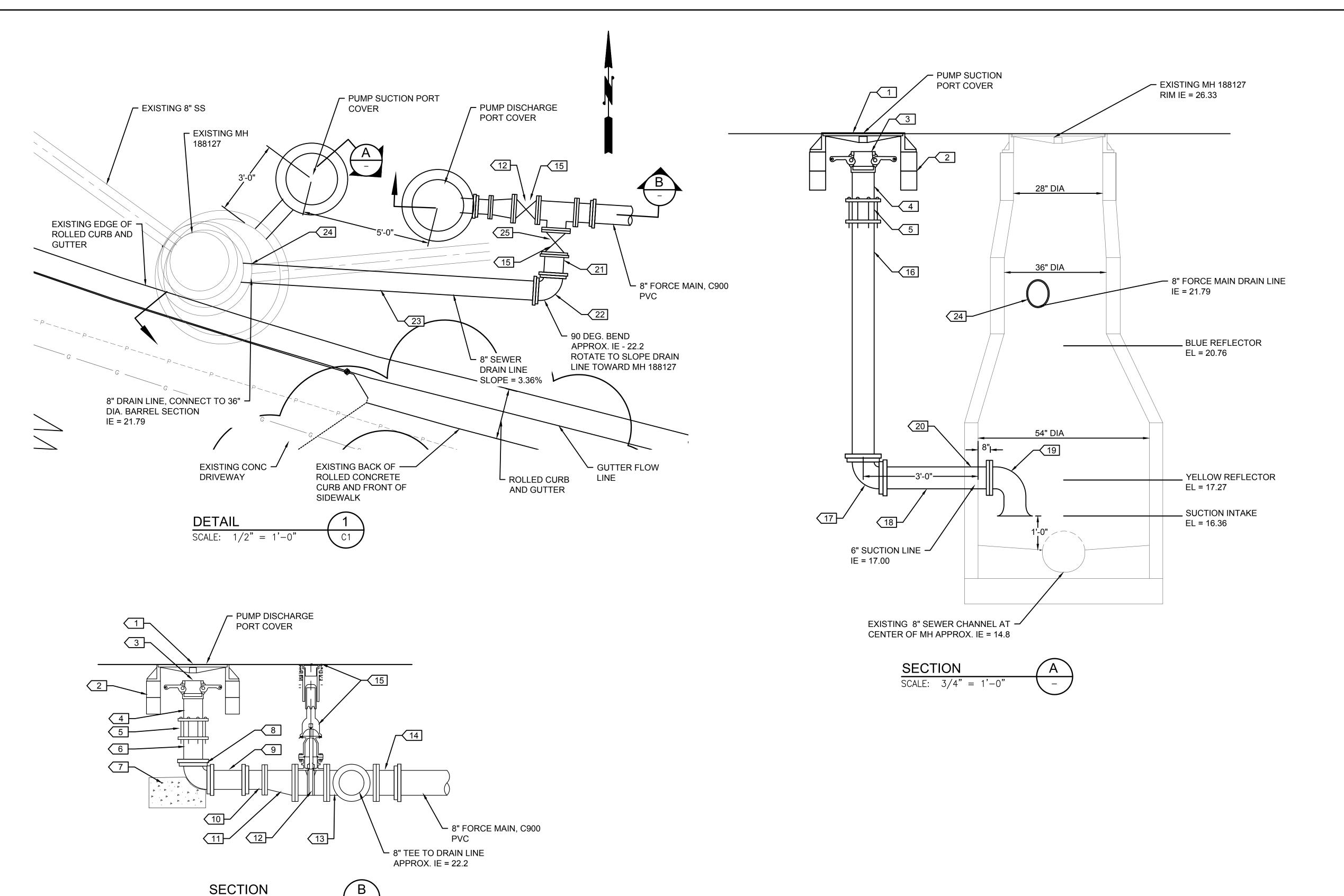












NOTES:

- 1. DUCTILE IRON PIPE FOR SEWER SHALL BE CLASS 52 SEWER PIPE. SEWER PIPE AND FITTINGS SHALL BE LINED WITH PROTECTO 401 LINING.
- 2. EXCEPT WHERE OTHERWISE SHOWN, ALL SEWER PIPE SHALL BE AWWA C900 PVC, DR 18.

KEY NOTES:

- 1. 1 24" MANHOLE RING AND COVER PER STD. DETAIL S-11
- 2. 2 24" DIAMETER PRECAST CONCRETE RISER RINGS, EACH 6" HIGH
- 3. 1 6" FEMALE STAINLESS STEEL CAMLOCK X 6" FEMALE NPT
- 4. 1 6" STAINLESS STEEL SPOOL, MALE NPT X PE (12" LONG)
- 5. 1 6" MECH. COUPLING, SS X DI, EQUAL TO ROMAC
- 6. 1 6" DI SPOOL, PE X PE (12" LONG)
- 7. 1 CONC. THRUST BLOCK PER STD. DETAIL W-1, SIZE FOR 200 PSI PRESSURE
- 8. 1 6" 90 DEG. BEND, MJ X MJ
- 9. 1 6" DI SPOOL, PE X PE (12" LONG).
- 10. 1 6" ADAPTER, MJ X FL
- 11. 1 8" X 6" ECCENTRIC REDUCER, FL X FL
- 12. 1 8" GATE VALVE, FL X FL
- 13. 1 8" X 8" TEE, FL
- 14. 1 8" ADAPTER, FL X MJ
- 15. 1 VALVE BOX ASSEMBLY PER STD. DETAIL W-11, EXCEPT LID TO BE LABELED "SS"
- 16. 1 6" DI SPOOL, PE X PE (LENGTH TO FIT, APPROX. 6'-7")
- 17. 1 6" 90 DEG. BEND, MJ X MJ (WITH JOINT RESTRAINT EACH END EQUAL TO MEGA LUG)
- 18. 1 6" DI SPOOL, PE X FL (LENGTH TO FIT)
- 19. 1 6" 90 DEG. BEND, FL X FLARE
- 20. 1 6" KOR-N-SEAL ADAPTER, CORE DRILL **EXISTING MANHOLE WALL**
- 21. 1 8" DI SPOOL, PE X PE (LENGTH TO FIT)
- 22. 1 8" 90 DEG. BEND, MJ X MJ
- 23. 1 8" DI SPOOL, PE X PE (LENGTH TO FIT, APPROX. 11'-7")
- 24. 1 8" KOR-N-SEAL ADAPTER, CORE DRILL EXISTING MANHOLE WALL
- 25. 1-8" GATE VALVE, FL X MJ

NOTES TO REVIEWER:

C900, PENDING COST AND DESIGN DEVELOPMENT.

FORCE MAIN TO BE EITHER HDPE OR PVC

REVISIONS NO DATE BY APPR

SCALE: 3/4" = 1'0"

Jacobs



NOT FOR CONSTRUCTION PRELIMINARY 30% REVIEW

AUGUST 2021

Approved By 10/2018 DATE 10/2018 DATE BIROL SHAHA PROJECT MANAGER

08/2021 DATE PAUL TISSELL DESIGNED BY JAN DANIELSON 08/2021 DATE JEFF SCHMIDT CHECKED BY

DRAWN BY



City of Bellevue NEWPORT SEWER BASIN CAPACITY IMPROVEMENTS CASCADE KEY FORCE MAIN FORCE MAIN CONNECTION DETAILS

D-1

DRAWING

SHT <u>14</u> OF <u>14</u>